TIME August 17, 1962

Smoking During Pregnancy

The U.S. Government plans to persuade 2,000 women to stop smoking. The aim is not simply to encourage abstinence from tobacco, nor will a woman become eligible merely by making known her desire to give up cigarettes. To qualify, a woman must have smoked during one recent pregnancy and be willing to quit smoking while car-

rying another child.

The experiment has been organized by the National Institutes of Health as part of a huge ten-year study of 50,000 pregnancies and the health and growth of the resulting children. Smoking during pregnancy is of special interest to the researchers because women who smoke seem more likely to have their babies prematurely. And prematurity, despite recent medical progress, is a hazard to health and even life: 50% of all babies who die in the first. month after delivery are among the 7% born prematurely. Some doctors, though. see no direct connection between smoking and prematurity; they argue that the problem is a matter of temperament, that high-strung women who smoke would have a high proportion of "preemies" anyway. To make sure, NIH's Dr. Richard Masland wants to check the same mothers before and after they quit smoking.

The design of the experiment is straightforward enough, and it might have been started earlier but for one drawback: there was no way to check on the women being tested to make sure that they did not sneak an occasional secret drag. Now NIH has found a chemical detective. Researchers at San Antonio's Southwest

Research Institute have demonstrated that acetonitrile—a breakdown product of burned tohacco—can be detected in the urine of anyone who smokes three or more cigarettes a day. The women participating in the experiment will have to give daily urine specimens for analysis to make sure they are not cheating.

MEDICAL TRIBUNE July 30, 1962

Women to Be Paid To Stop Smoking In Perinatal Study

Medical Tribune – World Wide Report Washington Bureau

BETHESDA, MD. — The Government is going to pay a group of pregnant women to stop smoking in order to check preliminary findings that excessive cigarette

smoking causes prematurity.

Dr. Richard Masland, director of the National Institute of Neurological Diseases and Blindness, said the new study was designed to provide answers to critics who contend that "it is the not the smoking but the type of woman who smokes that is likely to cause the unfavorable outcome."

"The only way to answer this is to get a group of women who smoke to stop," he said. "But we have to be sure that we can believe them when they say that they have stopped smoking. We are therefore working on a urinalysis to test for a by-product of the smoke. We shall select a group of women and will pay half of them to stop smoking, and the urine will indicate whether they actually have. We can then determine whether smoking influences the outcome of the pregnancy."

The new study will be part of the massive perinatal collaborative project, now in its fourth year, in which data have been compiled on more than 23,000 pregnant women and 17,000 children at 15 participating medical centers.

Preliminary data indicate that prematurity occurs more frequently among mothers who smoke than among nonsmokers, with a correlation between the degree of prematurity and the amount of smoking—the more a woman smoked, the less her infant is likely to weigh.

Although the study did not attempt to explain this phenomenon, investigators at Baltimore City Hospital, where the first studies were conducted, suggest that smoking could cause prematurity in one or both of two ways: nicotine, as a vasoconstricting agent, could reduce the blood supply to the fetus; or the mother could be substituting cigarettes for food and thus, also, be depriving the fetus of nourishment.